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had previously experienced for not heeding realistic warnings; the response was avoiding the waterhole; the cues were the sight of the waterhole and Kar's instructions; and the reward was the reduction of fear. Since I had not been brought up in Kwoma society, Kar's warning did not evoke fear and I did not make the right response.

Although the technique of warning provides the basis for the inculcation of supernatural fears, several other factors play an important part in this process. One of these factors is the belief that supernatural dangers are similar to real dangers, a fact which strengthens the Kwoma child's fear of them by the principle of secondary generalization.[4]

Since *marsalai* are described as great snakes or crocodiles which live in the swamp, realistic warnings about snakes, crocodiles, and other dangerous animals would tend to generalize to these supernatural monsters. In other words, each time a Kwoma is reinforced for heeding a warning about an animal, particularly a snake or crocodile, he is also somewhat reinforced for heeding warnings about *marsalai*,[5] that is, unrealistic fears. A second source of generalization is that warnings about *marsalai* all concern disturbing their dwelling places. The common word for house is used to describe these supposed dwellings, so that all realistic warnings about trespassing in, and stealing from, the house of human beings also strengthen the warnings about *marsalai*. Finally, *marsalai* are described as being huge. Since large animals and

[4] If two objects are described by the same term, a person tends to respond to them both in a similar manner. Hull has described this as secondary generalization. See C. L. Hull, "The Problem of Stimulus Equivalence in Behavior Theory," *Psychol. Rev.*, XLVI (1939), 9–30. It is also discussed by Miller. See N. E. Miller and John Dollard, *Social Learning and Imitation* (New Haven, 1941), chap. v. Experimental evidence in support of this principle has recently been adduced by Dr. Jane Birge. See J. S. Birge, "The Rôle of Verbal Responses in Transfer" (Doctoral Dissertation, Yale University, 1941). G. P. Murdock has found empirical support for this principle in a study of the generalization of incest taboos by means of common kinship terms.

[5] Kwoma vivify their warnings about *marsalai* by telling children that the sounds they hear at the time of a ceremony are the voices of these monsters. The sounds are in reality produced by gongs, bull-roarers, and flutes, but this theory offers another avenue of generalization from animals to *marsalai* on the basis of the sounds which they both make.

big men are likely to be more dangerous than small ones, generalization on the basis of size also tends to support the warnings issued about these supernatural beings.

Ghosts are described not only as having human form but as actually being the spirits of deceased persons. Kwoma seldom speak of ghosts in general terms, but usually specify the ghost of some particular deceased relative. When a Kwoma dreams of someone who has died, he is told that the ghost of this person has actually visited him in the night. Moreover, living persons are sometimes called ghosts. Thus the similarity between men and ghosts is impressed upon a child. Hence, when he is rewarded for heeding warnings about living persons, this should by generalization strengthen the habit of heeding warnings about ghosts. Kwoma children are told that ghosts can assume the form of birds and animals. Whenever a bird or animal is heard or seen at night, it is often suggested that it may be a ghost in disguise. Thus fear of ghosts may generalize from animals as well as from men.

Fear of food "poisoned" by sorcery has, like food contaminated by blood, a realistic source of generalization from food which is actually spoiled. Kwoma employ the same word (*kafwa sek*) to describe putrifying meat or fruit, and to describe food which they believe is "poisoned." Thus if a child becomes ill after not heeding the realistic warning against eating spoiled food, this should tend to strengthen warnings about sorcery. A second source from which the belief in sorcery may receive generalized support is realistic warnings concerning aggression from human beings. Each time a person is scolded, threatened, insulted, or spanked by another person, such an event should strengthen his fear that he can be harmed by sorcery also.

A realistic source from which fears about blood contamination may spring is less evident. The following suggestions may be made. When sickness results from food which is really contaminated, it should strengthen a person's tendency to avoid food which is supposed to be contaminated. Secondly, the Kwoma word for milk is "breast blood." Children are

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made to abhor milk at the time of weaning, and this abhorrence may generalize through the common term to the drinking of blood or to eating things believed to be contaminated with it.[6]

Imitation, as well as warning and generalization, is of considerable importance in the inculcation of supernatural beliefs. In the previous chapter it was indicated that imitation took its place along with teaching as one of the two most important mechanisms of culture transmission. Although imitation was not analyzed in detail, it was indicated that a Kwoma pupil is very frequently rewarded for behaving like other persons in the society, particularly those who are in the same sex, age, and kinship category as the pupil. Conversely, Kwoma pupils frequently do not gain rewards and do experience pain when they behave differently from these models. This is particularly true when the model gives evidences of being in a dangerous situation.[7] Thus to behave differently from a model comes to evoke anxiety in a Kwoma pupil, whereas to behave like one comes to have an acquired reward value.[8]

The following case will illustrate the way in which supernatural fears are transmitted by means of imitation. I started to whistle one evening while Mar and Mey were visiting me. Mar warned me to stop lest I attract ghosts, but I persisted. Mar then bolted for his house and Mey fol-

[6] Potable liquids such as coconut milk are classed with water, whereas undrinkable liquids such as milk, urine, and breadfruit sap are classed with blood.

[7] The following case will serve as illustration of pain suffered for not imitating. Awa became possessed one night and began to belabor her sister with a stick. Chinuwa caught hold of Awa to prevent her from harming anyone. Several children from the hamlet, hearing the commotion, gathered to see what was happening. Awa struggled against Chinuwa's restraining arms, finally broke free, and began to lay about her with the stick. All the children except Fit ran out of reach. He delayed for a moment and received a blow from Awa on his legs. He then ran away as the rest had done. Fit, by this event, was at first punished for not imitating the other children and then rewarded for imitating them by escaping further blows. Such a situation as this not infrequently presents itself to Kwoma children.

[8] See N. E. Miller and John Dollard, *Social Learning and Imitation* (New Haven, 1941).